Application Number: 10/789,365 Reply to O.A. of November 21, 2008

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

(Currently amended) A port system, comprising:

a-replaceable an implantable first fluid guiding system comprising a disc-shaped supporting body;

an external second fluid guiding system with a connecting head at one end, the connecting head comprising a connecting cannula and two connecting jowls arranged transverse to the connecting cannula, the connecting jowls forming a latching projection formed of a curved arc of greater than 180°, the latching projection pointing radially inwardly to an underside of the connecting head, wherein the connecting jowls are each coupled to a grip element, the grip elements coupled to the connecting head such that a movement of the grip elements toward each other results in a radial splaying movement of the curved arc of the latching projection about an axis arranged perpendicular to the underside of the connecting head for facilitating connection of the connecting head; and

a percutaneously implantable port for establishing a fluid connection between said fluid guiding systems, said port comprising a port casing, which forms a first connecting element elements protruding beyond the port casing and forming a radial protrusion configured to receive connecting head latching projection;

and a connecting device which comprises a second-connecting element on an upper side of the connecting device;

wherein said connecting head is fastened to said port casing by a releasable fastening engagement of said connecting elements and said connecting jowls upon the radial splaying movement of the connecting jowls.

Application Number: 10/789,365 Dkt. No.: 34097/US Reply to O.A. of November 21, 2008

(Currently Amended) The port system as set forth in claim 1, wherein the connecting
elements and connecting jowls are elastically pressed onto each other in said fastening
engagement with a pressing force.

- 3. (Currently Amended) The port system as set forth in claim 2, wherein the connecting elements and connecting jowls are moulded configured such that they press against each other in the fastening engagement, with a first force component parallel to said pressing force and a second force component transverse to the pressing force.
- (Currently Amended) The port system as set forth in claim 3, wherein the connecting elements and connecting jowls latch together in the fastening engagement in a positive-lock and frictional-lock.
- 5. (Currently Amended) The port system as set forth in claim 4, wherein one of the connecting elements forms a latching protrusion comprising a latching collar and the connecting jowls other of the connecting elements forms a latching projection which, in the fastening engagement, grips behind said latching protrusion and elastically presses against said latching collar.
- (Currently Amended) The port system as set forth in claim 5, wherein the connecting element which forms the latching protrusion comprising the latching collar gradually tapers to a constriction.
- 7. (Currently Amended) The port system as set forth in claim 1, wherein the connecting head comprises a connecting cannula which, in the fastening engagement of the connecting elements, protrudes into the port casing and is freed from or at least relieved of external forces by the fastening engagement.
- (Canceled)
- (Currently Amended) The port system as set forth in claim 1, wherein the <u>grip elements</u>
 <u>form</u> connecting device forms a pair of pincers and a jowl of said pincers forms the second
 connecting element.

Application Number: 10/789,365 Reply to O.A. of November 21, 2008

(Currently Amended) The port system as set forth in claim 1, wherein the [[first]]
 connecting element is moulded elements are molded non-flexibly on the port casing.

Dkt. No.: 34097/US

- 11. (Currently Amended) The port system as set forth in claim 1, wherein the port casing comprises a main casing and a membrane casing, which serves to accommodate a sealing membrane, protrudes into the main casing, and is releasably connected to the main casing, and wherein the [[first]] connecting element is elements are formed by the membrane casing.
- 12. (Currently Amended) The port system as set forth in claim 1, wherein the [[first]] connecting element is element is gradually flares flare to a latching protrusion on an upper side facing the connecting head and said latching protrusion encircles a longitudinal axis of the sleeve-shaped port easing and is then constricted in the longitudinal direction to form a latching collar for the second connecting element.
- 13. (Original) The port system as set forth in claim 12, wherein the latching protrusion and the latching collar encircle said longitudinal axis of the port casing in curved arc segments.
- 14. (Currently Amended) The port system as set forth in claim 1, wherein the port casing comprises a main casing and a membrane casing which serves to accommodate a membrane and can be rotationally connected to preferably screwed onto [[-]] the main casing, and wherein a plurality of arm elements, which radially point away from a longitudinal axis of the port casing on an upper side of the port casing and serve as rotational stoppers for a tool, for establishing the rotational connection, each form [[a first]] connecting element elements.
- 15. (Original) The port system as set forth in claim 1, wherein the connecting head comprises a connecting cannula and wherein the first fluid guiding system feeds in or into the port casing, flush with said connecting cannula, in order to avoid or at least minimize turbulence in the fluid at a transition between the connecting cannula and the first fluid guiding system.
- 16. (Original) The port system as set forth in claim 1, wherein the connecting head comprises a connecting cannula and said connecting cannula and at least one connector region of the first fluid guiding system, guided into the port casing, exhibit the same flow cross-section, in order to avoid or at least minimize turbulence in the fluid.

-4-

Application Number: 10/789,365 Reply to O.A. of November 21, 2008

Dkt. No.: 34097/US

17. (Original) The port system as set forth in claim 1, wherein the port casing forms a curved guide on an underside, in order to deflect a catheter of the first fluid guiding system, attached to

said guide, to the casing opening without producing kinks.

18. (Original) The port system as set forth in claim 17, wherein the port casing forms an

opening funnel on its underside and said opening funnel expands from the casing opening out

and protects a catheter of the first fluid guiding system from kinks.

19 – 27. (Canceled)

28. (Currently Amended) A port system, comprising:

an implantable first fluid guiding system;

an external second fluid guiding system with a connecting head at one end, said

connecting head comprising a plurality of first connecting elements:

-a The port system of claim 1, wherein the percutaneously implantable port for establishing a fluid connection between said fluid guiding systems, said port comprising

comprises a port casing having a threaded surface;

and wherein the [[a]]connecting device emprising comprises an outer threaded surface

configured to engage with the port casing threaded surface, and a plurality of second connecting elements arranged on an upper side of the connecting device, said second connecting elements

configured to engage with said first connecting elements; and

-wherein said connecting head is fastened to said port easing by a releasable fastening

engagement of said first and second connecting elements.

29-34. (Canceled)

35. (New) A port system, comprising:

an implantable first fluid guiding system comprising a disc-shaped supporting body;

-5-

Application Number: 10/789,365 Dkt. No.: 34097/US Reply to O.A. of November 21, 2008

an external second fluid guiding system with a connecting head at one end;

a percutaneously implantable port for establishing a fluid connection between said fluid guiding systems, said port comprising a port casing, which forms a first connecting element;

and a connecting device which comprises a second connecting element on an upper side of the connecting device;

wherein said connecting head is fastened to said port casing by a releasable fastening engagement of said connecting elements;

. wherein the connecting head comprises a connecting cannula and said connecting cannula and at least one connector region of the first fluid guiding system, guided into the port casing, exhibit the same flow cross-section, in order to avoid or at least minimize turbulence in the fluid.

36. (New) The port system as set forth in claim 35, wherein the first fluid guiding system feeds in or into the port casing, flush with said connecting cannula, in order to avoid or at least minimize turbulence in the fluid at a transition between the connecting cannula and the first fluid guiding system.

-6-